

Michigan Aviation Professional Training Course

September 25, 2017

Mt. Pleasant, Michigan





Welcome

- Welcome from City of Mt. Pleasant
- Housekeeping
 - Restrooms/Breaks/Lunch Order
 - Materials
 - ACRP Report 16 *Guidebook for Managing Small Airports*
 - Flash drive contents - tied to the agenda
- Introductions
 - Randy Coller, MDOT Office of Aeronautics
 - Kent Maurer, Jackson County – Reynolds Field
 - Mary Kay Trierweiler, MDOT Office of Aeronautics
 - Stephanie Ward, Mead & Hunt



Attendee Introductions

- Name
- Where are you from? (City, County, etc.)
- What is your current role with your local airport?
- How did you get to be in your current position?
- How long have you been in your current position?



General Agenda

- 1. Regulatory Items
- 2. Airport Organization/Management Documents
- 3. Airport Planning and Development
- 4. Funding and Revenues
- 5. Community Communications
- 6. Operations
- 7. Resources
- General Q/A



1. Regulatory Items



1a. Grant Assurances

- Over 30 Assurances covering a wide range of topics if you are a federally obligated airport
- Sample assurances include:
 - Rates & Fees
 - Fair Access
 - Planning & Design Standards
 - Maintenance of Pavements
 - Clear Approaches & Compatible Land Use
 - Obligation for Use



1b. Grant Process

The Steps through an Aviation Project

For those new to aviation contracts or
those who want a reminder

1B Grant Process (cont.)

Who is involved?



= Sponsor

(Other names could be The Airport, Locals, the Airport Board, or Local Authority)



= The State

(AKA MDOT, the State of Michigan, Aeronautics, or the Department)



= Consultant

(They may also answer to their official company name)



= Contractor

(Cleverly called the contractor)



= MAC

(The Michigan Aeronautics Commission)

They don't really look or act like this

1B Grant Process (cont.)

What is a project?

Project = Anything using Federal or State money

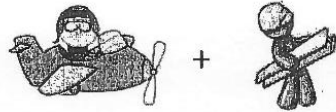
Examples:

Design
Construction
Equipment Purchase
ALP Update
Land Purchase
User Survey
Environmental Review
Noise Study
Wildlife Hazard Assessment

1B Grant Process (cont.)

What are the Contracts?

Construction Contract (For contractor to build it)



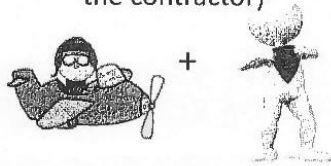
- Signed by the Sponsor and the Contractor
- Has the cost of construction and the time it will take to finish project
- State bidding system used? The State will send it out
- Local bids taken? The Airport sends it out
(The consultant often offers to do this for the Sponsor)

Sponsor Contract (\$ \$ \$ \$)



- Signed by the Sponsor and MDOT
- Some call it a Grant Agreement or Grant Assurance
- It's the money contract
- A Signed Resolution from the local authority must be included
- Has costs of project listed in it (toward the end of the document)
- Has many Federal and State "grant assurances" that you agree to follow by signing it.

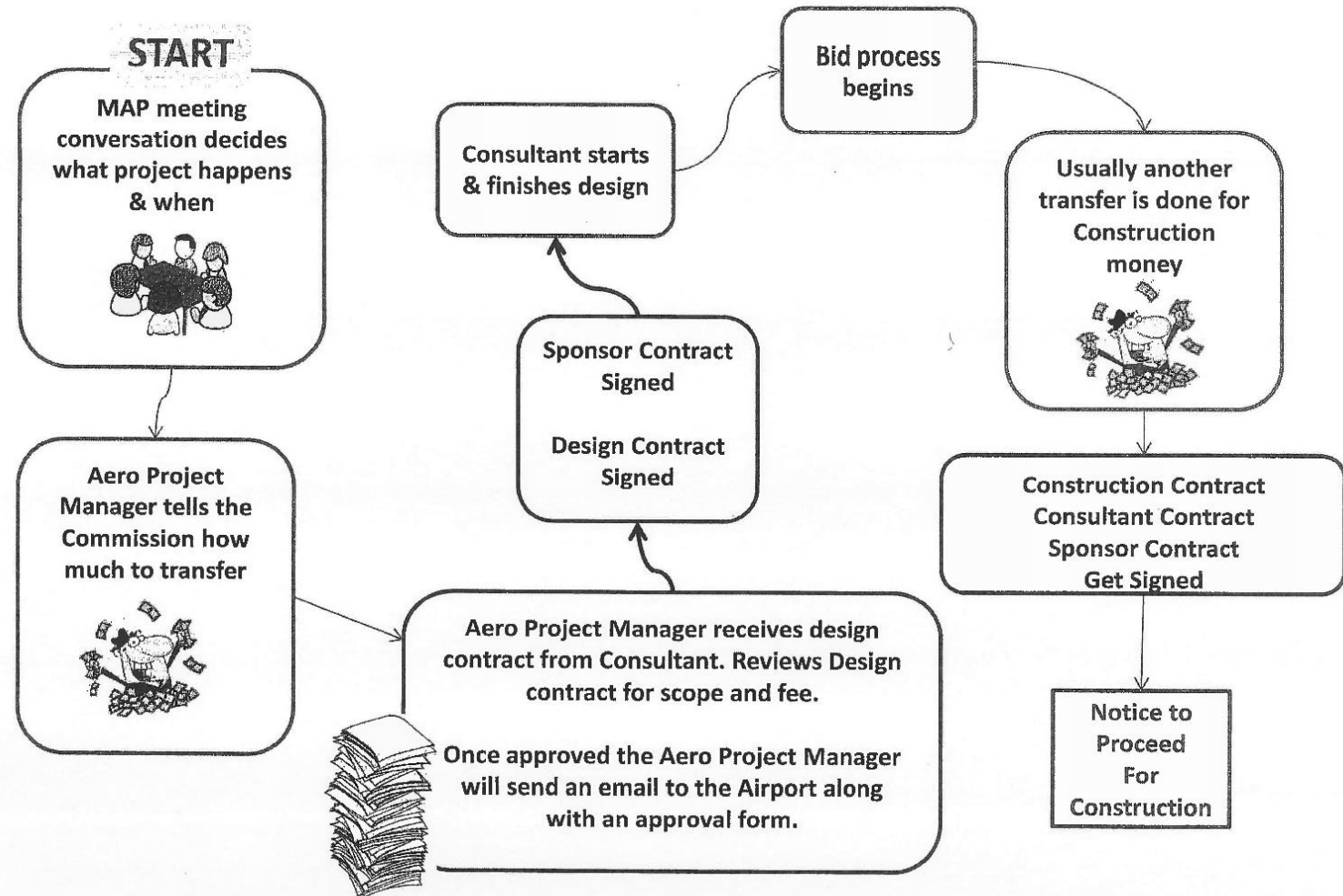
Consultant Contract (For the consultant to oversee the contractor)



- Signed by the Sponsor and the Consultant
- Sponsor reviews it for scope and fee
- State also reviews this for scope and fee and will send you a copy of their approval

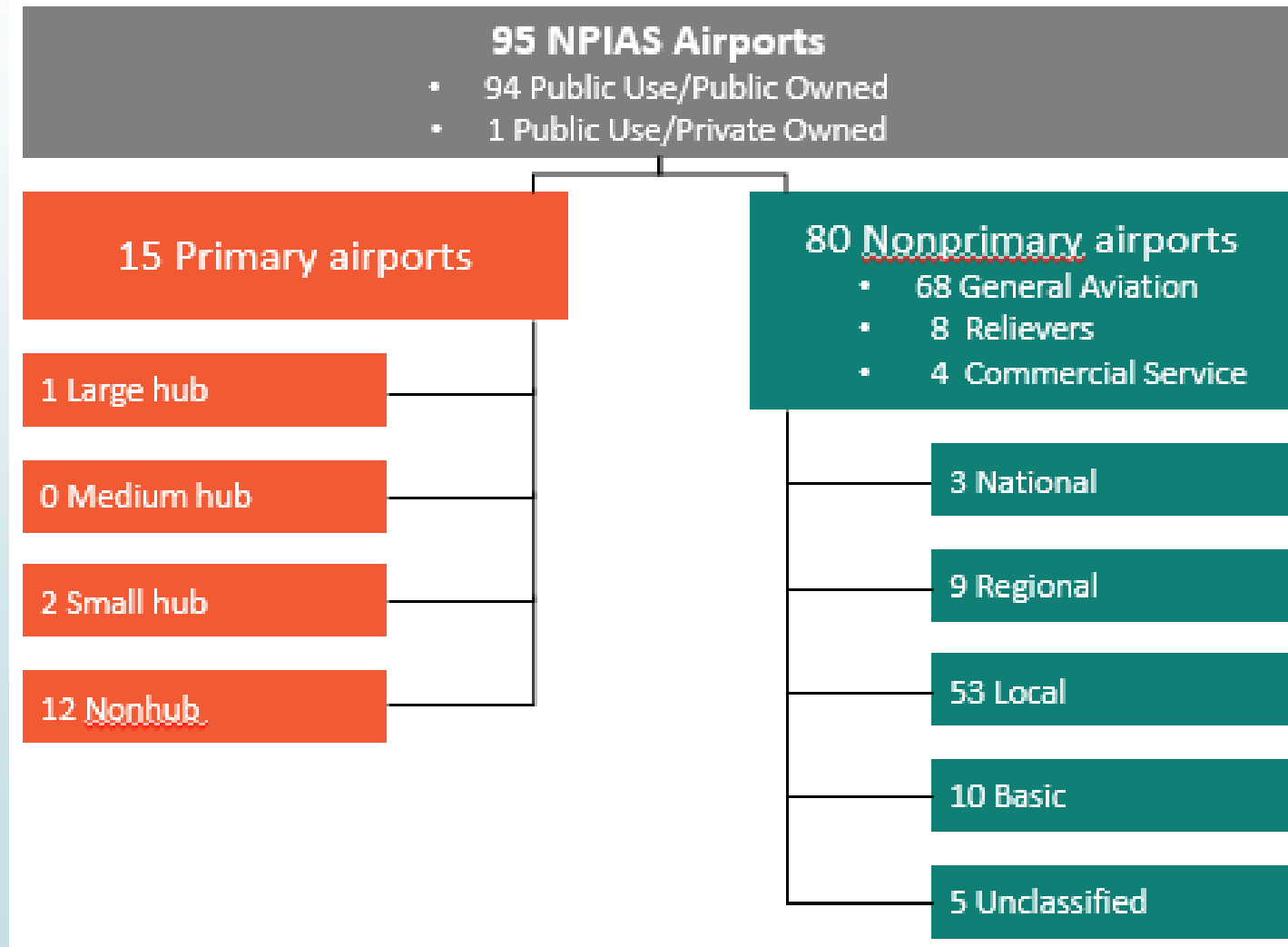
1B Grant Process (cont.)

Wait, who does what when?



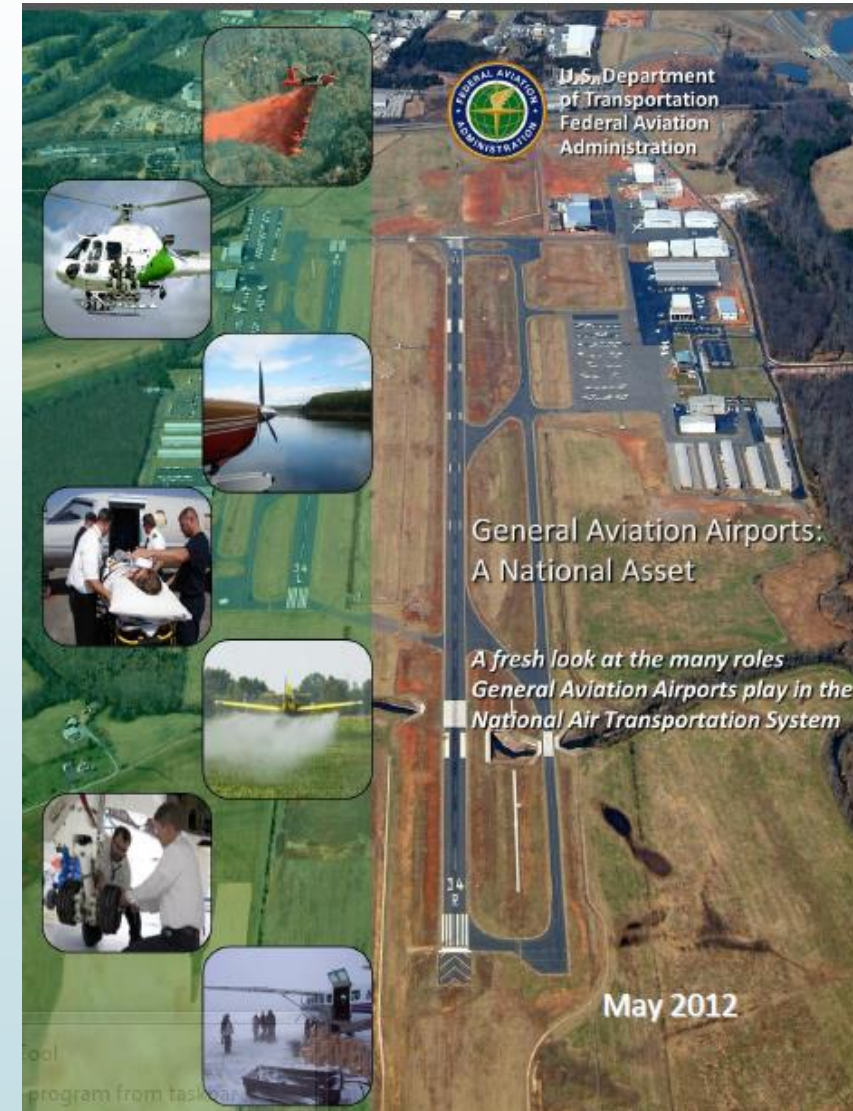
1c. NPIAS – National Plan of Integrated Airport Systems

- Over 3,000 airports nationally listed in the NPIAS
- Inclusion in NPIAS makes an airport eligible for federal funds



1c. NPIAS – National Plan of Integrated Airport Systems

- General Aviation (GA) airports specifically classified by the FAA ASSET Study as:
 - National
 - Regional
 - Local
 - Basic
 - Unclassified



1c. NPIAS – National Plan of Integrated Airport Systems (cont.) – ASSET Classifications

National	Regional	Local	Basic
<ul style="list-style-type: none">• 5,000+ instrument operations, 11+ based jets, 20+ international flights, or 500+ interstate departures; or• 10,000+ enplanements and at least 1 charter enplanement by a large certificated air carrier, or• 500+ million pounds of landed cargo weight	<ul style="list-style-type: none">• Metropolitan Statistical Area (Metro or Micro) and 10+ domestic flights over 500 miles, 1,000+ instrument operations, 1+ based jet, or 100+ based aircraft; or• The airport is located in a metropolitan or micropolitan statistical area, and the airport meets the definition of commercial service	<ul style="list-style-type: none">• 10+ instrument operations and 15+ based aircraft; or• 2,500+ passenger enplanements	<ul style="list-style-type: none">• 10+ based aircraft; or• 4+ based helicopters; or• The airport is located 30+ miles from the nearest NPIAS airport; or• The airport is identified and used by the U.S. Forest Service, or U.S. Marshals, or U.S. Customs and Border Protection (designated, international, or landing rights), or U.S. Postal Service (air stops), or has Essential Air Service; or• The airport is a new or replacement facility activated after January 1, 2001; and• Publicly owned or privately owned and designated as a reliever with a minimum of 90 based aircraft



1d. MDOT Aeronautics Studies

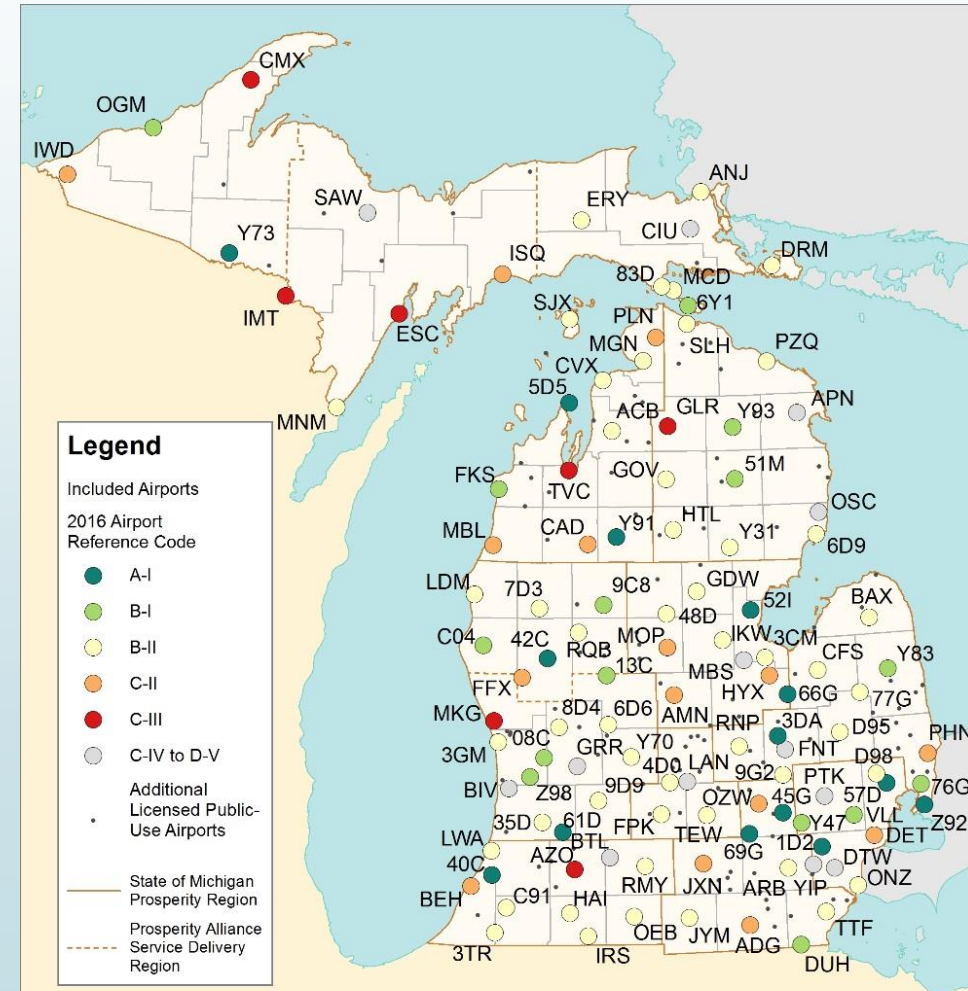
Michigan Aviation
System Plan
(MASP 2017)

Community Benefits
Assessment
(CBA) Tool

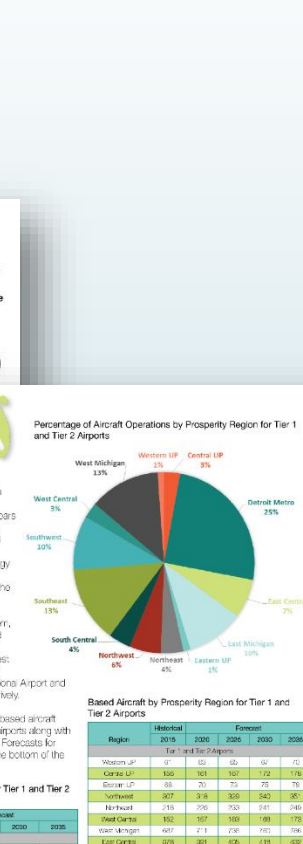
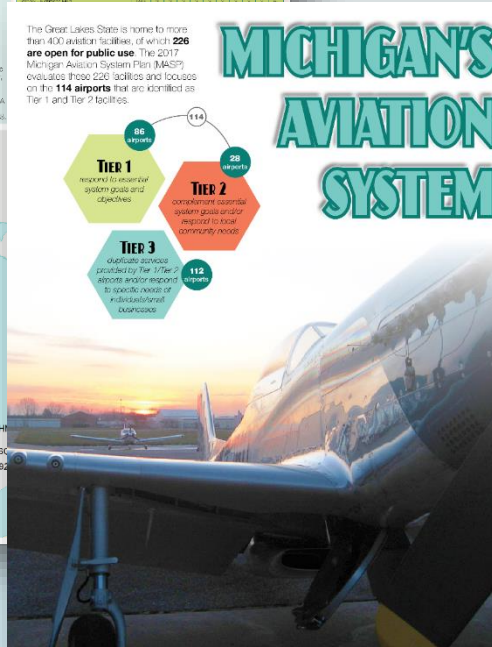
Statewide
Pavement
Management
System (APMS)

1d. MDOT Studies (cont.)

- Michigan Aviation System Plan (MASP)
 - Tier 1, Tier 2 and Tier 3
 - Identifies service targets such as:
 - Business Centers
 - Population Centers
 - Tourist Centers
 - Remote Access



- Michigan Aviation System Plan (MASP 2017)



1d. MDOT Studies (cont.)

- Community Benefits Assessment (CBA) Tool

Michigan Department of Transportation - Office of Aeronautics
CBA Community Benefits Assessment

Airport Role in Economy

Airport: Lenawee County
City: Adrian
Current FAA ARC: C-II
County: Lenawee
Ownership: Public
Scenario: Current
Service Area: Lenawee
Run Date: 3/31/2017 8:31:57 AM

MASP Tier: Tier 1
MASP ARC: C-II
Evaluated for Year: 2016

Airport Features

Primary Runway Length: 5,001
Primary Runway Width: 100
Instrument Approach: LPV

Activity Data

Total Operations: 14,970
Total Aircraft: 59
Total Passengers: 30,345
Total Cargo Tons: 0

On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
Direct Effect						
1. Airport (incl. FBO and air related tenants)	28	28	\$2,211,000	\$2,211,000	\$6,465,000	\$6,465,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	14	14	\$342,000	\$342,000	\$1,049,000	\$1,049,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
Supplier and income re-spending effects*						
5. -due to Airport and Related Activities**	20	25	\$1,010,000	\$1,030,000	\$2,697,000	\$3,817,000
6. -due to Visitor Spending	3	6	\$104,000	\$238,000	\$328,000	\$778,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	65	73	\$3,667,000	\$3,821,000	\$10,539,000	\$12,109,000

Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$83,000	\$15,000
10. State Sales Tax	\$617,000	\$110,000
11. Tax generated by fuel sales	\$11,752	

Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:

	Tier 1	Tier 2	Tier 3
Serve Significant Population Centers			
Serve Significant Business Centers			
Serve Significant Tourism/Convention Centers			
Provide Access to the General Population			
Provide Adequate Land Area Coverage			
Preserve Regional Capacity			
Serve Seasonally Isolated Areas			
Inclusion in NPAS			

Other Attributes

* on the Service-area economy as defined by the user
** Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code
NPAS = National Plan of Integrated Airport Systems
Average visitor spending (per visitor): \$227.00
Visitor spending source: SURVEY - SE Michigan

Page 1 of 1
Developed by Economic Development Research Group, Inc., Boston, MA

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1d. MDOT Studies (cont.)

- Statewide Pavement Management System (APMS)



← → ↻ ⓘ mdotnetpublic.state.mi.us/apms/ ☆ ⋮

MDOT Michigan Department of Transportation, Office of Aeronautics
2015 Statewide Pavement Management System Update

Home Inventory Area Summary Inventory Age Summary Condition Summary Airport Details PCI Procedure Miscellaneous

In 2013, the Michigan Department of Transportation (MDOT) Office of Aeronautics initiated an effort to update their statewide Airport Pavement Management System (APMS). Applied Pavement Technology, Inc. (APTech), assisted by Mead & Hunt, Inc., was selected to complete the work associated with this update. The project includes 97 airports (all Tier 1 and Tier 2 airports with the exception of Detroit Metro, Grand Rapids, and Willow Run) divided into three phases, with approximately one-third of the airport system inspected each year. The APMS data and results, along with project reporting, fulfills a majority of the Public Law 103-305's requirements regarding airport pavement maintenance management. This interactive data exchange application (IDEA) tool presents the results of the APMS update and is organized into the following modules accessible from the tabs above:

- **Inventory Area Summary**—View a summary of pavement inventory area information at the State and individual airport level.
- **Inventory Age Summary**—View a summary of pavement inventory age information at the State level.
- **Condition Summary**—View a summary of pavement condition information at the State and individual airport level.
- **Airport Details**—View detailed inventory and condition data for each airport.
- **PCI Procedure**—Review background information on the PCI survey method used to assess pavement condition.
- **Miscellaneous**—View definitions of acronyms used throughout the IDEA, and learn about this program as well as Applied Pavement Technology.



1e. Basedaircraft.com

Secure | <https://www.basedaircraft.com/Default.aspx?ReturnUrl=%2f>

 Federal Aviation Administration

National Based Aircraft Inventory Program



Based Aircraft Inventory for NPIAS airports.

WARNING

This is a Federal Aviation Administration (FAA) protected computer system. FAA systems, including all related equipment, networks and network devices (e.g., including Internet access) are provided for the processing of official United States (U.S.) Government information.

Intentionally accessing a protected Government computer without authorization or in excess of authority and as a result causing damage, recklessly or otherwise, will constitute a violation of Title 18, United States Code, Section 1030, Computer Fraud and Abuse Act (CFAA), and may be referred to the Federal Bureau of Investigation (FBI) for investigation and prosecution. Violations of the CFAA can lead to both civil and criminal liability, including seeking monetary relief for economic damage.

The FAA will monitor usage for violations of public laws, national information security policies, and agency policy. The FAA will intercept, record, audit, read, copy, and disclose by and to authorized personnel for official purposes, including administrative, civil, and/or criminal investigations.

Access or use of this computer system by any person, whether authorized or unauthorized, constitutes consent and monitoring to these terms for violation of Federal laws, national security policy, and agency computer policy. If you are not an authorized user of this system or do not consent to monitoring, exit this system now.

- Update Regularly
- If you have overlap – work to resolve it.
- Need at least 10 based aircraft
 - to meet Basic ASSET Classification

1 F. State Licensing

- Airport Manager License
 - Requires an exam
- Airport License

Michigan Department of Transportation Airport Manager Examination

Study Guide

Michigan Department of Transportation
Aeronautics
2700 E. Airport Service Dr.
Lansing, Michigan 48906-2160
517-335-9681

This examination is administered by the Michigan Department of Transportation, Bureau of Aeronautics, to determine the qualifications of persons desiring to be licensed as Airport Managers in the State of Michigan. Each question is worth two points. Successful completion of the exam requires a score of 70 percent or greater.

The examination is not an open book examination.

Notes, books, and similar materials are not to be taken into the examination area when applicants complete this examination.

Persons appearing to take the exam will be required to have a photo identification.

Applicants have one hour to complete the examination.

You may keep this study guide for future reference.



Questions on Regulatory Items ?



2. Airport Organizational/ Management Documents



2. Airport Organizational/Management Documents

- Minimum Standards
- Rules and Regulations
- Marketing and Business Plans
- Leases
- Insurances

2A. Airport Minimum Standards

- Why Does My Airport Need Minimum Standards?
- The FAA requires Minimum Standards if your airport receives AIP funds or conveyance of Federal property . . .
FAA Advisory Circular 150/5190-7

Many individual elements must be examined in developing minimum standards for commercial aeronautical activities on airports. The following elements are often considered in setting minimum standards:

- ☐ What type of airport are we talking about? Is it a small general aviation airport with limited aircraft operations and few based aircraft? Is it a busy reliever airport located in or near a metropolitan area? Is it an airport used by air taxi or commuter services? Or is it an airport that accommodates scheduled airline service.
- ☐ What type of businesses will be operating at the airport? What types of products and services are in demand at the airport?
- ☐ How much space will be required for each activity? Will the businesses need to rent airport property? Under what terms and conditions can specialized aviation service operations (SASOs) be accommodated?
- ☐ What minimum insurance coverage and indemnity provisions will be needed?
- ☐ Is each minimum standard directly related to the aeronautical activities to which it will be applied?
- ☐ What are the responsibilities of airport businesses regarding snow removal or facility maintenance?
- ☐ If flight training will be provided to the public, should it be on a full-time or part-time basis? How many and what types of aircraft should be involved? What types of training should be provided? What provisions should be made for storage and maintenance of aircraft?



2A. FAA Minimum Standards (cont.)

- Provide standards for commercial aeronautical activities
- If you have Minimum Standards: when were they last reviewed and updated?
- If you don't have Minimum Standards: beg, borrow or steal some as a starting point
- Create or review the Minimum Standards with cross-section representation of the airport and governing board(s)
- Seek legal review of the document for legality with emphasis on penalties for violations



2A. Airport policies/procedures to consider in your minimum standards or as standalone documents

- Wildlife policy
- Awards policy
- Zoning, signs, special use, security, etc.
- Emergency procedures
- Snow removal procedures
- NOTAM procedures



2A. Minimum Standards Summary

- Governs “aeronautical activity” only
- Intended to ensure safety
- Allows “fair competition”
- Need to be reasonable and non-discriminatory i.e. “non-exclusionary”
- Publish on airport’s web site
- Copies of the JXN Minimum Standards are available



2B. Airport Rules and Regulations

- Govern conduct for all airport patrons, businesses and hangar owners.
- Covers all matters not related to aeronautical business
- Do you have rules and regulations?
- When was the last time the document was reviewed?
- If you don't have Rules and Regulations: beg, borrow or steal some as a starting point



2B. Rules and Regulations (cont.)

- Create or review R & R with a cross section of your airport and governing bodies
- Decide what penalties or sanctions you want
- Get legal counsel for proper wording and legal adoption by the appropriate Board, Council or Commission
- Establish a regular review schedule either as-needed or on a three to five year cycle
- Copies are available



2C. Marketing and Business Plans

- Marketing and Business Plans were created with guidance from ACRP Airport Cooperative Research Program guide books
- Both plans utilized the Airport Advisory Council as a primary committee with final work submitted to the Airport Board
- The Marketing Plan was facilitated by Experience Jackson staff (Jackson Chamber)
- Both plans sought airport community input via surveys, interviews and draft plan reviews



2C. Marketing Plan Strategies

- Encourage and enhance partnerships and collaboration for special events, business to business patronage and new events
- Embark on an airport branding exercise and study
- Feasibility of installing an electronic entrance sign
- Encourage attracting a business that rents aircraft



2C. Airport Business Plan

- JXN example:
 - Marketing Plan was just completed in August of 2017
 - Had broad based input and suffered many draft reviews and revisions



2C. Business Plan Accomplishments

- Gives an overview of airport history
- Creates a snapshot of the current state of affairs with emphasis on financials
- Offers a prescription for future planning areas



2C. Business Plan

Key Concepts for the Future

- Predevelop private and corporate hangar sites
- Market and sell excess airport property and hangars
- Enhance the attractiveness of the airport as a destination
- Enhance Aviation Heritage Park
- Enhance airport community outreach
- Continue “active management” of the airport
- Continue capital planning

2D. Leases

- Types:
 - Ground leases
 - T-Hangar rental leases
 - Corporate hangar leases
 - Special airport use agreements
 - events or joint use agreements)
- Consider Items such as:
 - Rates
 - Terms
 - Rights

These grant assurances will have an impact on the leases you set up and administer – make sure to refer to them early and often:

5. Rights and Powers

19. Operations and Maintenance

22. Economic Nondiscrimination

23. Exclusive Rights

24. Fee and Rental Structure

29. Airport Layout Plan



2E. Insurance Requirements

- Insurance for T-hangar rentals?
- Insurance for airport based businesses?
- Insurance for special events?

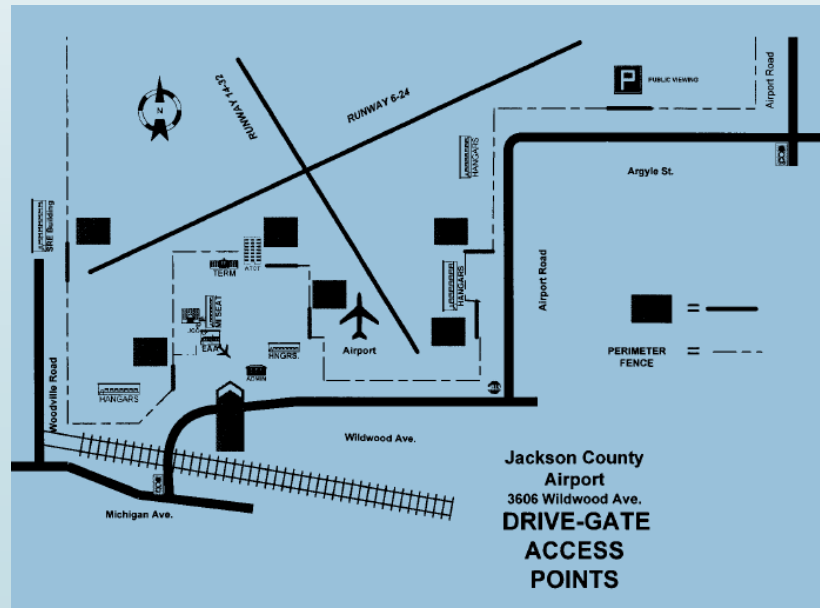


2E. Airport Aviation Insurance Coverage

- What are your insurance exclusions?
- Does your insurance cover airport volunteers?
- Are your coverage limits satisfactory?
- Do you have terrorism riders?
- How does the airport's insurance requirements blend with your City/County insurance policy?

2f. Emergency & Security Plans

- Coordination is key
- Current contact information
- Airfield maps
- Training



EMERGENCY CONTACT LIST

Page One of Two

Note: All phone numbers are (517) area code unless otherwise indicated.

<u>AGENCY</u>	<u>CONTACT PERSON</u>	<u>OFFICE</u>	<u>HOME</u>	<u>CELL</u>
Airport Manager	Kent Maurer	788-4225	764-5808	206-6003
Airport Admin.	Amy Godfrey	788-4225 768-2052		
Airport Technician	Josh Clamon	788-4374 788-4225	796-1842	206-6097
Airport Maintenance Worker	Joe Sanders	788-4225	764-7779	206-2127
AIRPORT BOARD				
	Dave Lutchka	522-4596	522-4596	262-9870
	Earl Poleski Jr.	750-4133	563-8955	262-8955
	Jim Shotwell	783-1258	787-4106	
	Tom Davis	782-7163		914-1516
	Steve Wellman	788-0442	782-7261	262-1880
	Randy Treacher	788-4335	784-5652	206-5863

AIRPORT BUSINESSES

Airport Restaurant	783-3616
AVIS	782-8218
Cascade Refrigeration	750-2100
Checking Time	769-2830
Jackson Aero	780-0343
JCC Flight Center	787-7012
Patrick Properties	787-6633
Skyway Aviation	787-2460
SOLO Aviation	734-323-0031
Blackman Township	
Mike Jester	788-4223
Jon Johnston	937-7568 812-1972
County Administrator	768-6623
Control Tower JXN	David Flynn
	782-9852 or 787-1307
E-911 Dispatch Center	787-7911
Environmental	HUCO Inc.
	782-7667
(FAA)	
NOTAM DESK	877-487-6867
BRIEFING DESK	800-992-7433
Lansing Approach	517-321-1355



Questions on Airport Organizational/ Management Documents?



3. Airport Planning and Development

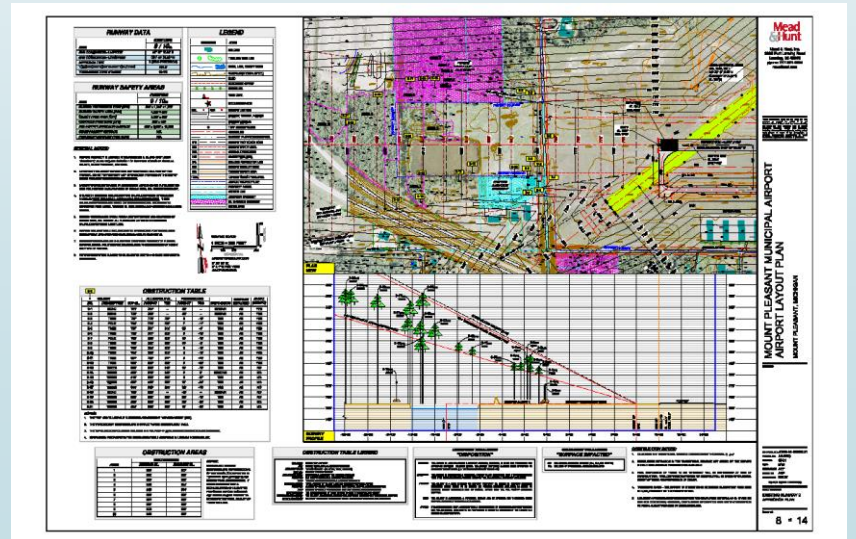


3. Airport Planning and Development

- Airport Master Plans/Airport Layout Plans (ALPS)
- Exhibit A Property Maps
- Airport Zoning and Land Use – Airport Approach Plans
- Tall Structures Act Permit
- Clear Approaches
- Land Acquisition
- Land Releases
- Wildlife Hazard Mitigation
- Environmental Topics

3a. Airport Master Plan/ Airport Layout Plan(ALP)

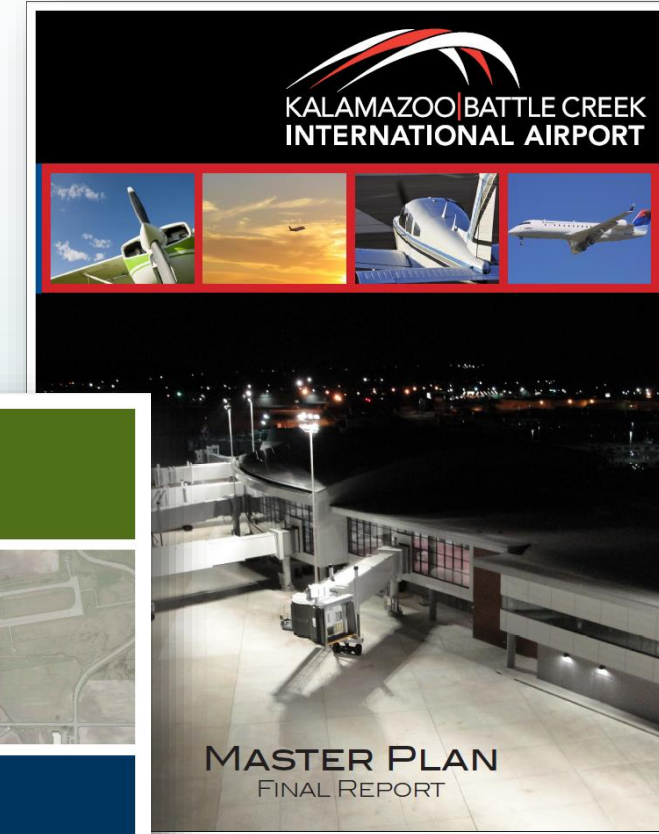
- Covers a wide range of issues:
 - Forecasts
 - Alternatives for development
 - FAR Part 77
 - Obstruction Identification
 - Compatible Land Use
 - Wildlife attractants
 - Environmental Overviews



3A. Master Plans/ALPS

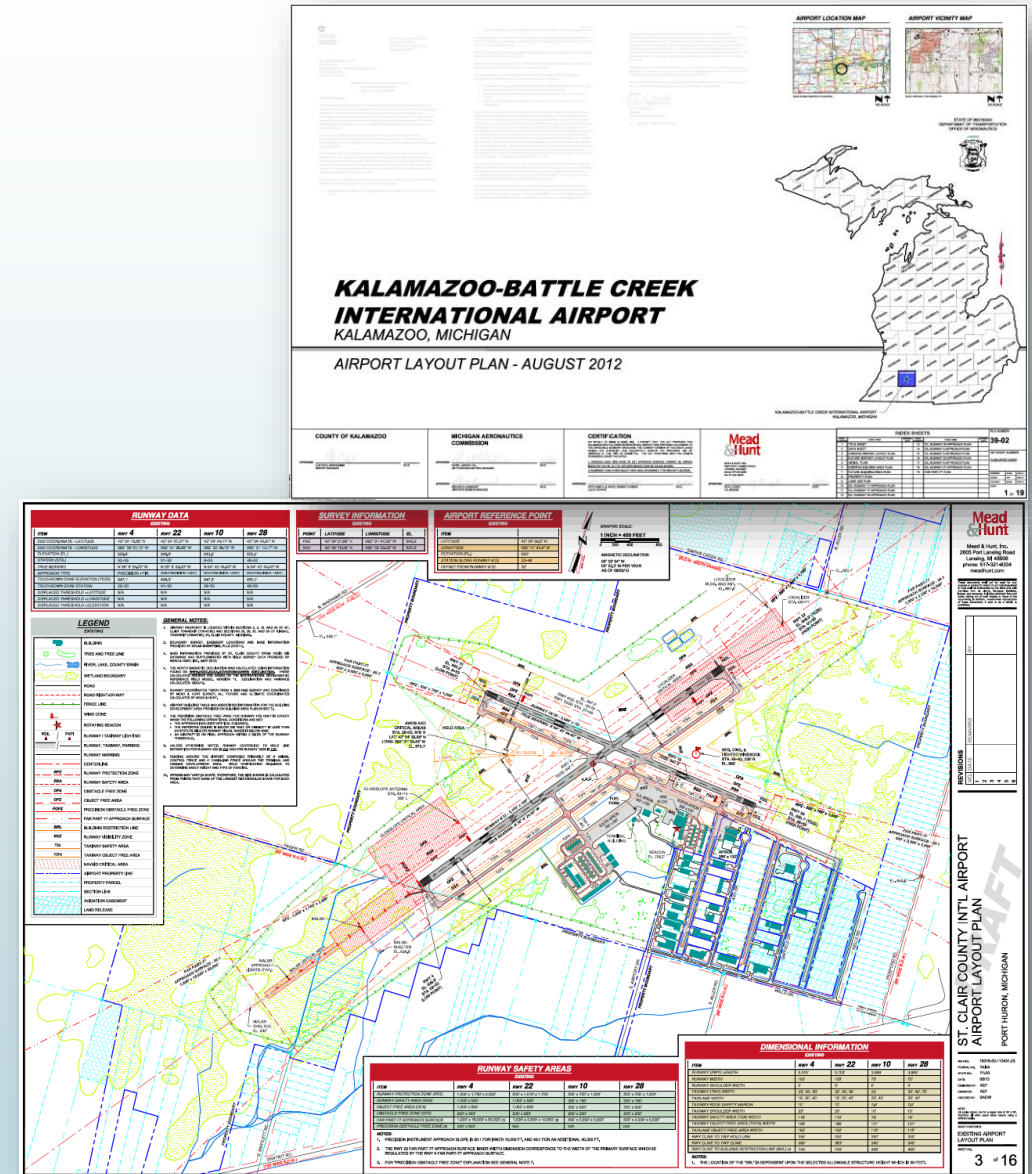
What is a Master Plan and an ALP Project

- Master Plan
 - Written document
 - Contains a variety of information that leads to recommendations for development
 - Usually results in the development of an ALP



What is a Master Plan and an ALP Project

- Airport Layout Plan (ALP)
 - Graphic set of drawings
 - Visual representation of the existing and future development
 - Often has an abbreviated analysis process
 - Narrative report to summarize process and findings
 - Follows new FAA SOP 2.0



3A. Master Plans/ALPS

Mapping Related Information Needs

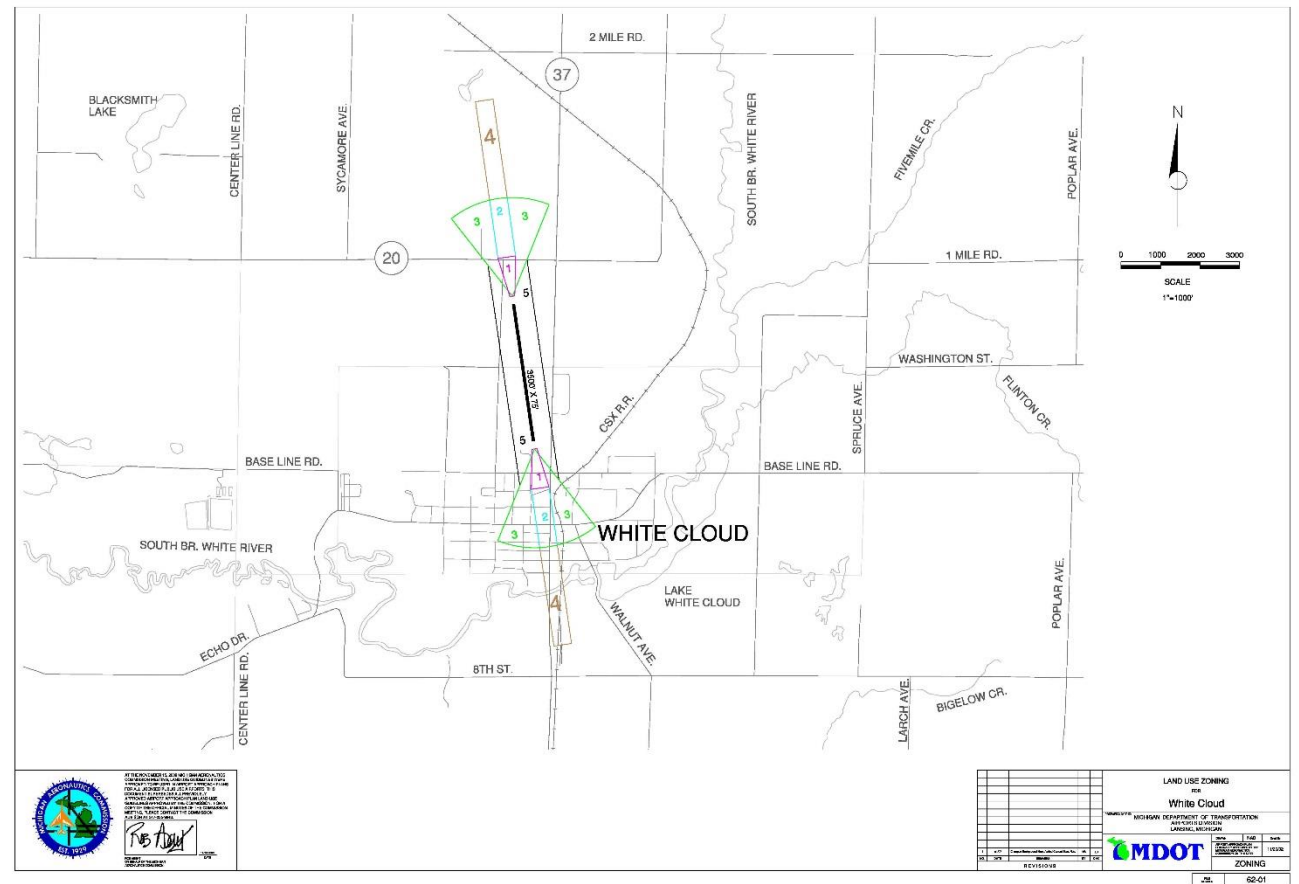
	Master Plan w/ALP	ALP only	AGIS Elements
Aerial Photo	X	X	X
Topographic Mapping/Features	X	X	X
Ground Contours	X	X	X
FAR Part 77 Surface (50:1, 34:1 or 20:1)	X	X	X
PAPI OCS	X	X	
Feature Attribution	X		X
Vertically Guided Approach Surface	X	X	X

- Now part of an ALP as the Property Plan
- FAA SOP 3.0
- Historical summary of property
- Once shown on an Exhibit A, property is federally obligated



3c. Airport Zoning & Land Use Airport Approach Plans

- Adopted by the MAC
- Provides land use and height restrictions to protect your airport
- Must be implemented locally to be effective



3d. Tall Structures Act Permit Act 259 of 1959

A permit is required if either of the two conditions apply:

- 1 – any construction over 200' AGL
- 2 – any construction in the vicinity of an airport if:

Longest runway length	Proximity to closest runway	Slope
More than 3200 feet	Within 20,000 ft.	100 to 1
3200 feet or less	Within 10,000 ft.	50 to 1
For a Heliport	Within 5,000 ft.	25 to 1

For example: Near an airport with two runways: a 3500' long primary, and a 2800' long cross-wind runway. At a location 3100 feet from the cross-wind runway, a structure more than 31 feet ($3100 \div 100 = 31$) above the runway elevation requires an application. Unless an airspace study results in a finding of noninterference, the Tall Structure Act requires us to object to:

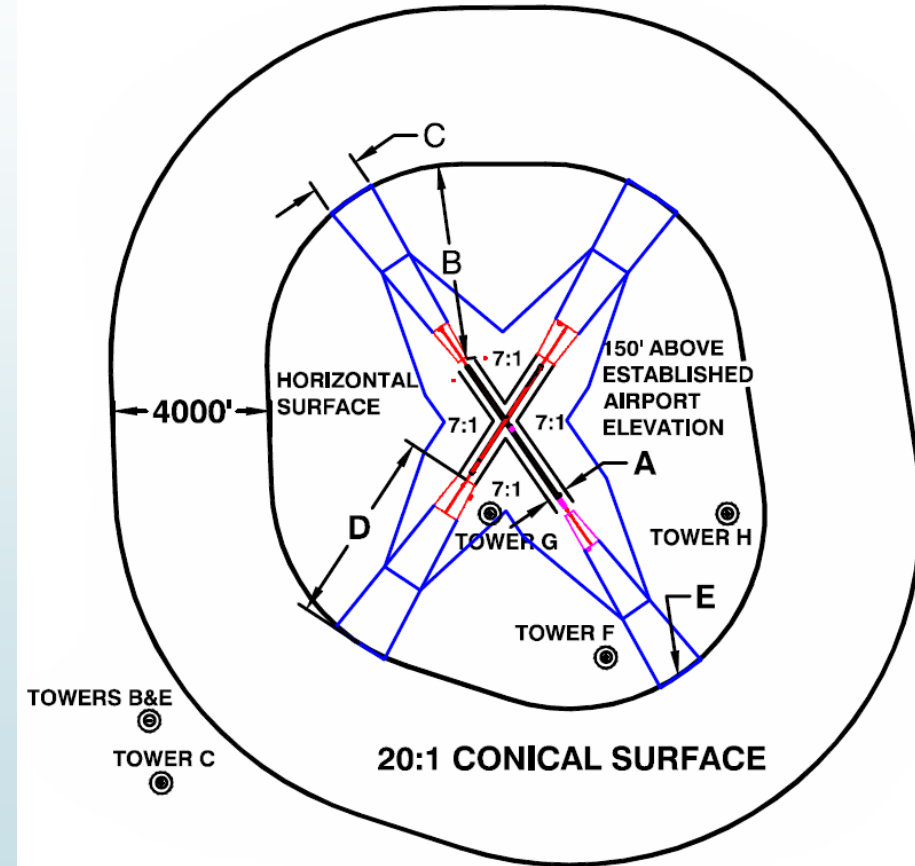
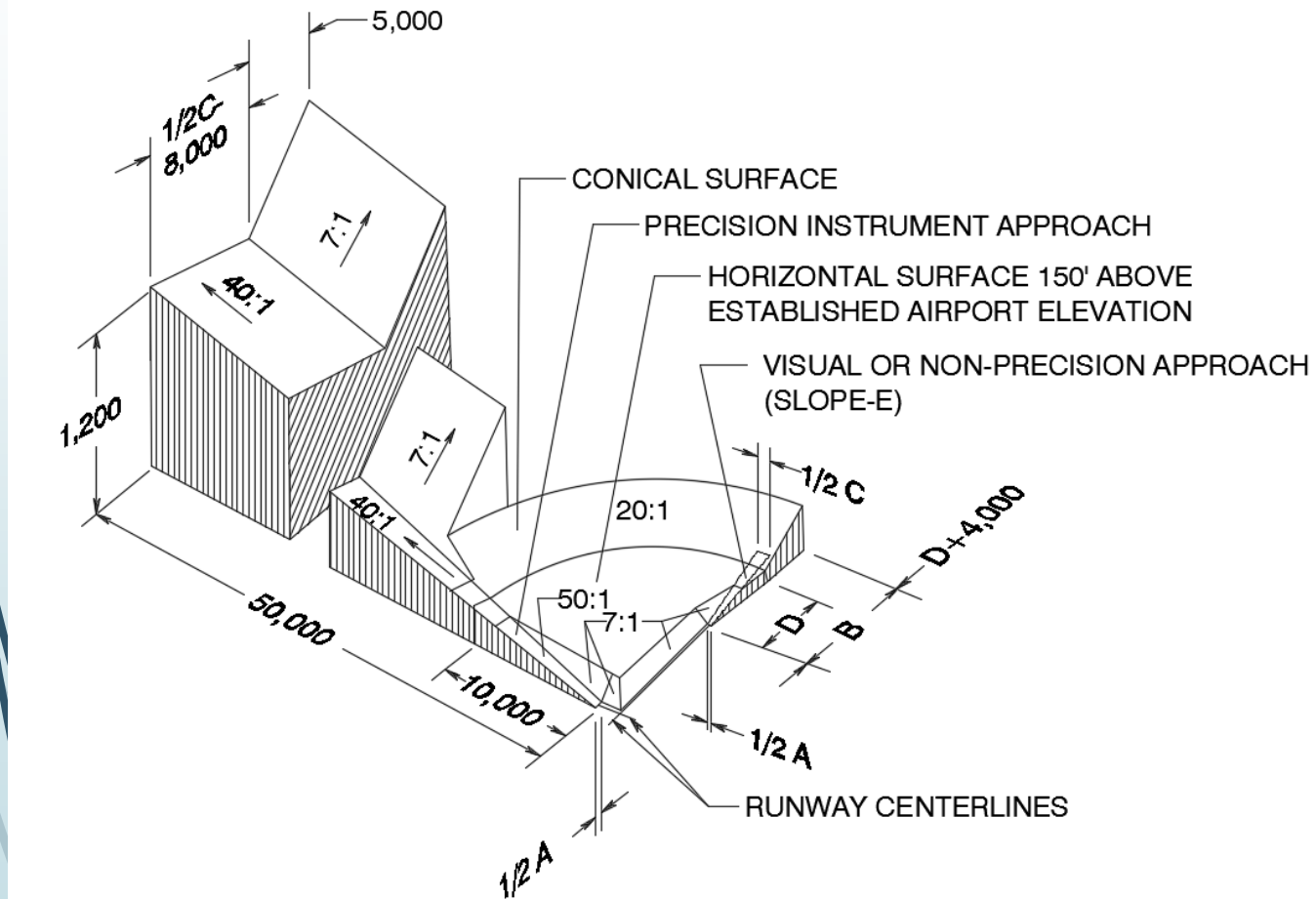
- Structures greater than 1000 ft. high (500 feet in a VFR flyway or in the vicinity of a natural landmark).
- Structures which would increase the Minimum Obstruction Clearance Altitude (MOCA) for an instrument approach procedure.
- Structures which obstruct imaginary surfaces (as defined in the Tall Structure Act).
- Structures which violate a local airport zoning ordinance.



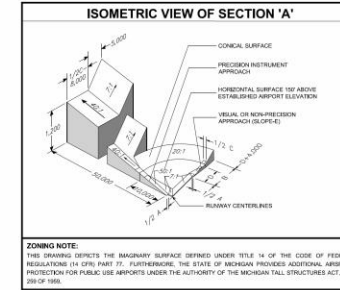
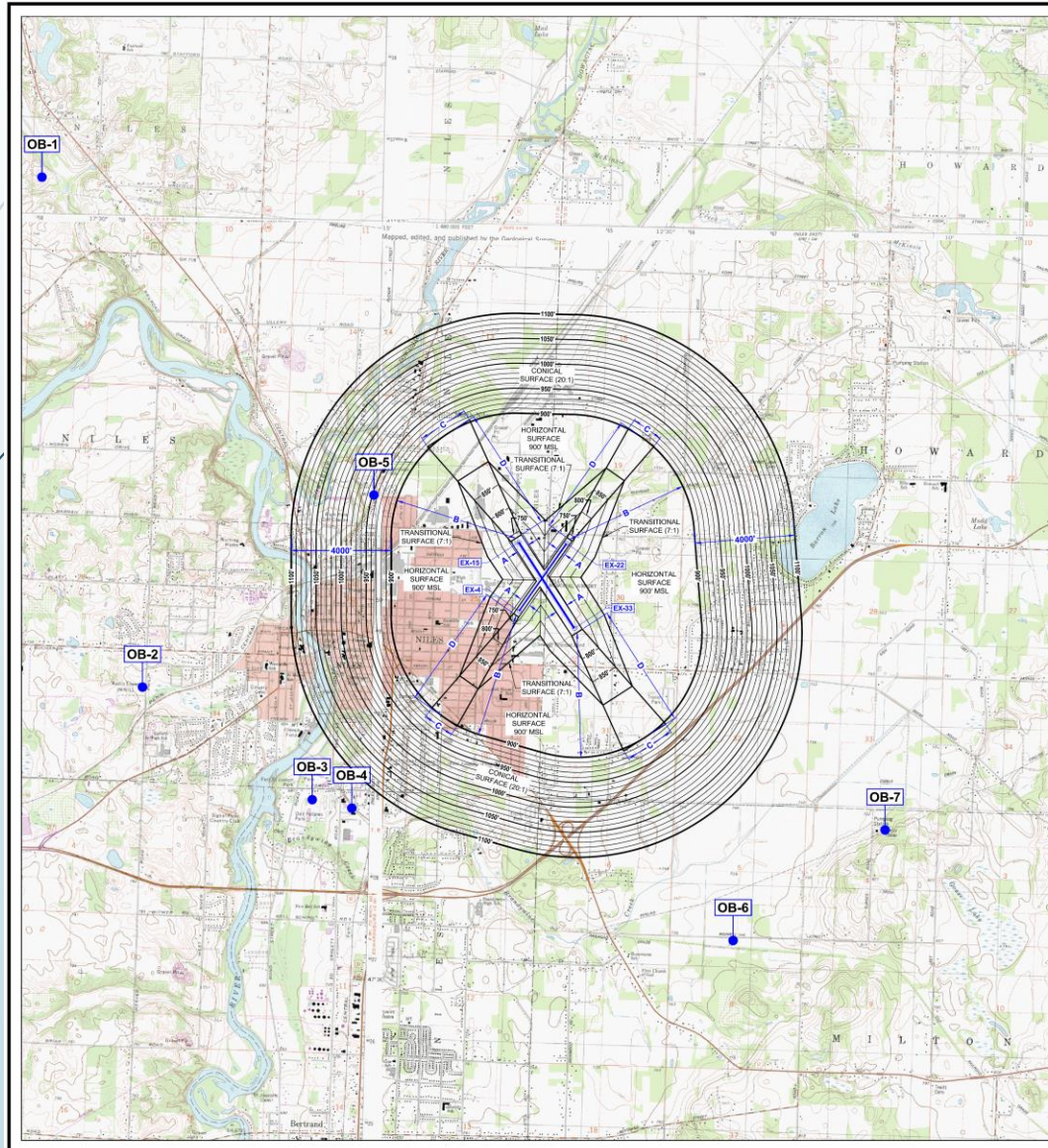
3e. Clear Approaches

- FAR Part 77 Surfaces
- Obstruction Identification
- Obstruction Mitigation (land acquisition)

3e. FAR Part 77 Surfaces



3e. FAR Part 77 Surfaces (cont.)



OBJECT DATA TABLE

OBJECT	TYPE	LATITUDE	LONGITUDE	AGL	MSL	PENETRATION	DISPOSITION
OB-1	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN
OB-2	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN
OB-3	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN
OB-4	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN
OB-5	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN
OB-6	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN
OB-7	TOWER	41° 47' 24.00\"N	86° 10' 15.00\"W	500'	1,074'	N/A	REMAIN

NOTE:
 1. N/A: STANDS FOR NOT IN THE DATABASE.
 2. PENDING: STANDS FOR PENDING MEASUREMENTS.
 3. OBJECTS SHOWN ARE NOT AN INCLUSIVE LIST DUE TO CONTINUAL CONSTRUCTION OF TOWERS AND TALL STRUCTURES. PLEASE CONSULT FAA AND MEAD & HUNT OFFICE OF AERONAUTICS FOR ADDITIONAL INFORMATION.

APPROACH SURFACE DIMENSIONS

LABEL	ITEM	RUNWAY			
		EXISTING		NEW	
A	WIDTH OF PRIMARY SURFACE	500'	500'	250'	250'
B	RADIUS OF HORIZONTAL SURFACE	5,000'	5,000'	5,000'	5,000'
C	APPROACH SURFACE OUTER WIDTH	2,000'	2,000'	1,200'	1,200'
D	APPROACH SURFACE LENGTH	5,000'	5,000'	5,000'	5,000'
E	APPROACH SURFACE SLOPE	20:1	20:1	20:1	20:1

GENERAL NOTES

- ANY OBJECTS SHOWN ARE LOCATED WITHIN THE USE OF "OBSTRUCTION EVALUATION" DATA PROVIDED BY MEAD & HUNT OFFICE OF AERONAUTICS DATED AUGUST 2013. THE CURRENT FILE CONTAINS ALL APPLICATIONS RECEIVED SINCE 1988.
- MEAD & HUNT AND MEAD OFFICE OF AERONAUTICS ARE NOT RESPONSIBLE FOR THE ACCURACY OF THE NOAA DATABASE. THE DATABASE MAY NOT BE INCLUSIVE OF ALL OBSTACLES WITHIN THE PART-77 SURFACES SHOWN.
- SECTIONAL CHARTS & THE FAA SHOULD BE REFERENCED FOR ADDITIONAL INFORMATION DUE TO THE CONTINUED PROLIFERATION OF TOWERS AND ASSOCIATED OBSTACLES.
- OUTSIDE OF THE APPROACH AND TRANSITIONAL SURFACES THERE ARE NO REPORTED FAR PART-77 OBSTACLES WITHIN THE SURROUNDING VICINITY OF THE AIRPORT; HOWEVER, THERE MAY BE OBSTACLES BEYOND THE EXTENTS OF THE MAP SHOWN.



Mead & Hunt
 Mead & Hunt, Inc.
 2605 Port Lansing Road
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 meadhunt.com

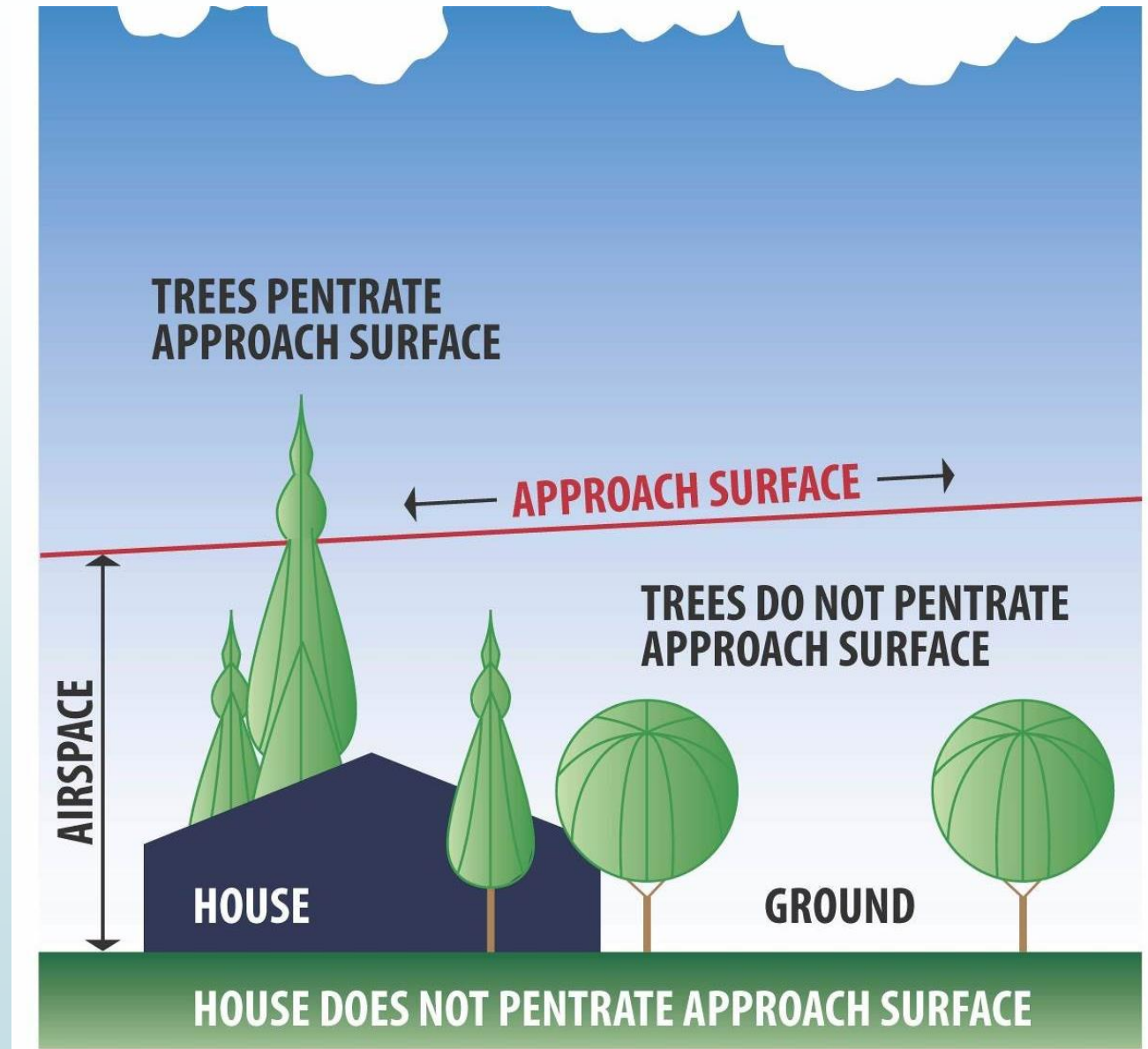
JERRY TYLER MEMORIAL AIRPORT
 AIRPORT LAYOUT PLAN
 NILES, MICHIGAN

REVISION NO. 14144-130208.01
 ORIGINAL NO. 130207-1612
 STATE OF MI
 DATE 11-1-15
 DESIGNED BY: AEF
 DRAWN BY: AEF
 CHECKED BY: SADDY
 DO NOT SCALE DRAWINGS

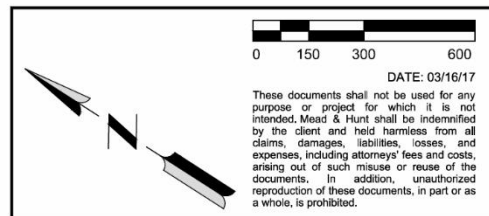
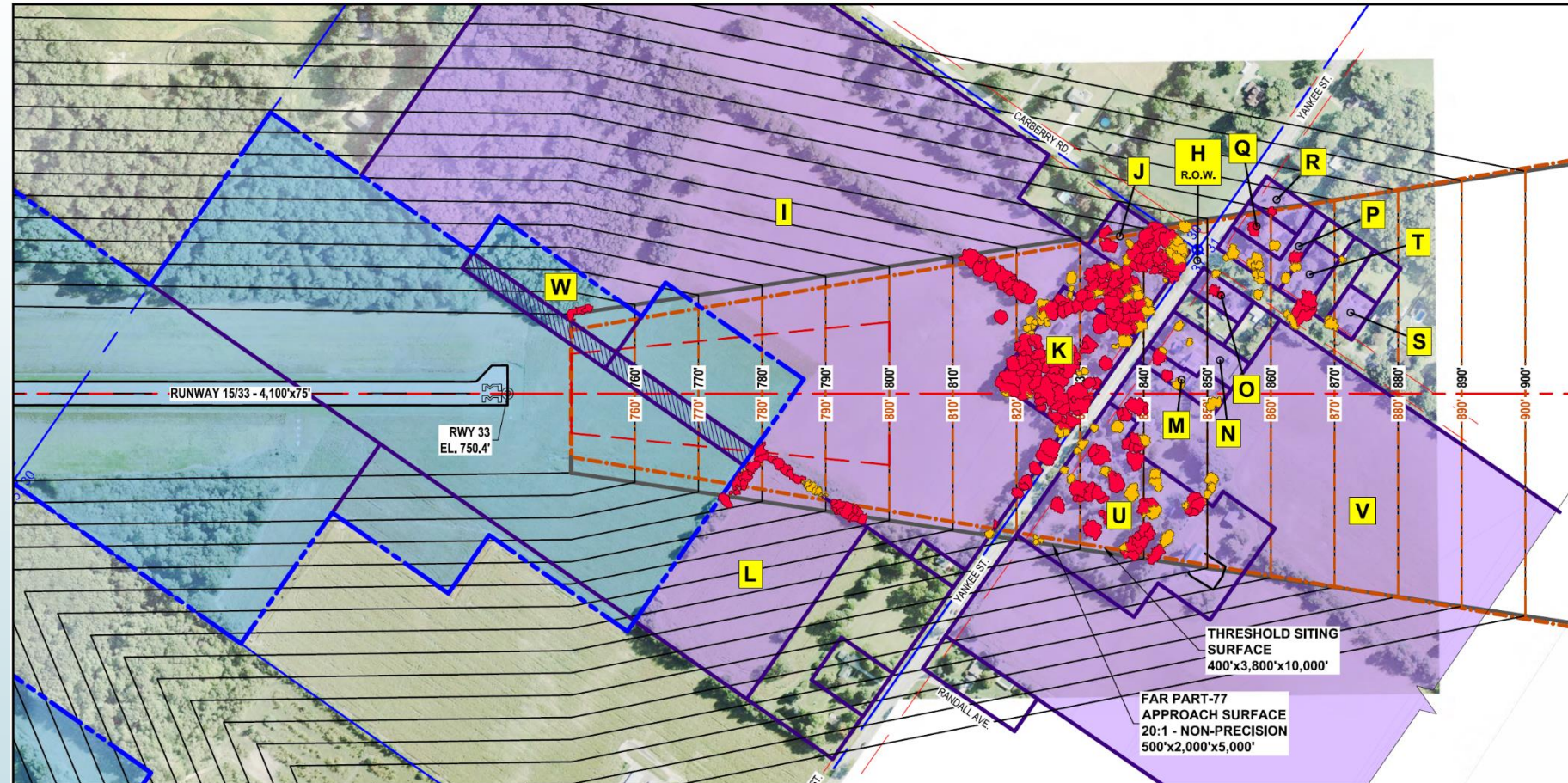
AIRPORT AIRSPACE
 PLAN

3e. Example of an approach surface

- Ratio of approach slopes vary:
 - 20:1 Visual
 - 34:1 Non-precision
 - 50:1 Precision



3e. Example of Obstruction Identification



LEGEND			
	AIRPORT PROPERTY LINE		THRESHOLD SITING SURFACE
	FAR PART-77 APPROACH SURFACE		THRESHOLD SITING OBSTRUCTIONS
	FAR PART-77 BACKSLOPES		PROPERTY PARCEL
	FAR PART-77 APPROACH OBSTRUCTIONS		EXISTING AVIGATION EASEMENT
	FAR PART-77 OBJECTS WITHIN 10 FT		OVERLAP IN DEEDS

RUNWAY 33

OBSTRUCTION ANALYSIS - PARCEL IDENTIFICATION

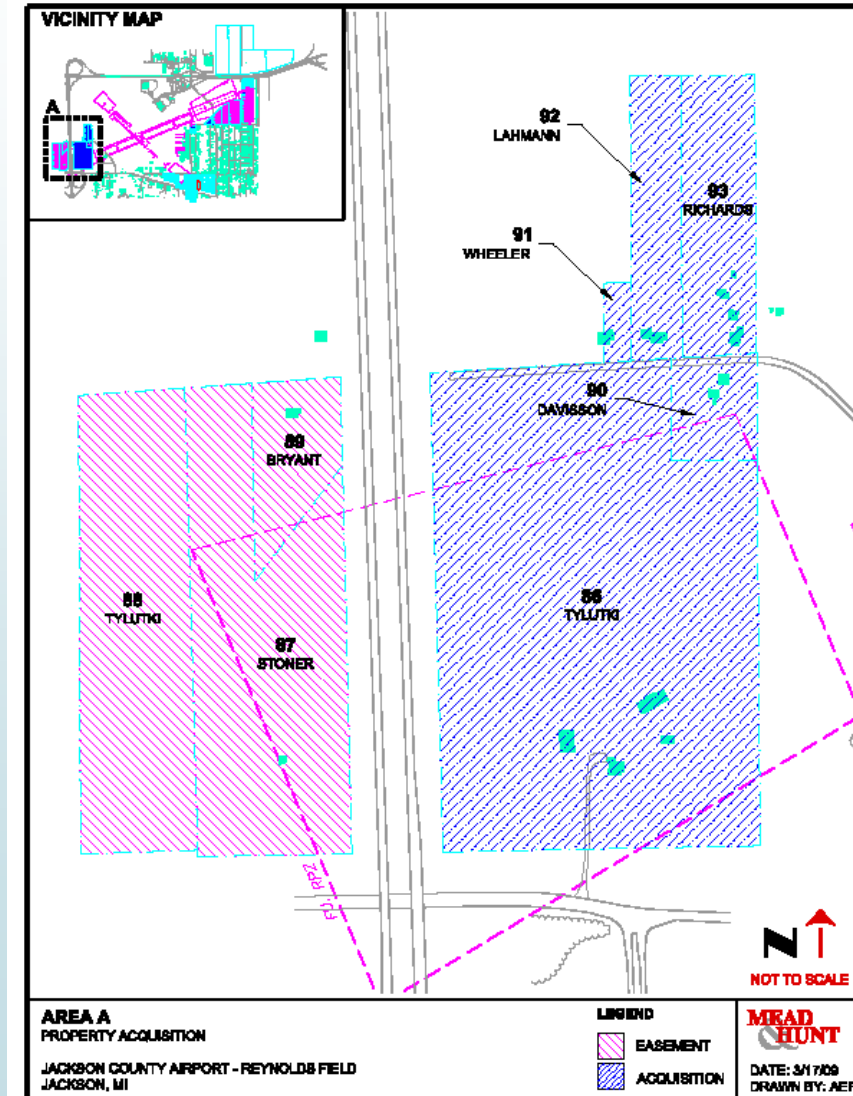
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3f. Land Acquisition

- Use MDOT Determination Process
 - Fee Simple Acquisition
 - Avigation Easement
 - Combination of zoning and approach plan
- Airport must pay for initial coordination and appraisals up front and seek reimbursement after good faith offer is accepted by property owner.





3g. Land Releases

- MDOT Preliminary Land Release Checklist
- 16 Primary Questions/Data Points
 - 5 major areas that cover
 - What do you want to release
 - Why do you want the release and how will it benefit the airport?
 - What is the history of the property?
 - Financial & environmental aspects?
 - Defining the release area

3g. Land Releases (cont.)

MDOT Preliminary Checklist

- Provides early opportunity to investigate feasibility of release prior to expending funds and effort
- Addresses same issues as full release package but at much higher level of detail and limited support information

PRELIMINARY LAND RELEASE CHECKLIST

Airport:	Location:
Sponsor Contact:	Telephone No.:
Purpose of Release:	

Location of Property To Be Released: Attach Airport Layout Plan sheet and highlight property to be released along with legal description. Identify any structures to be constructed on the property and maximum height of facilities.

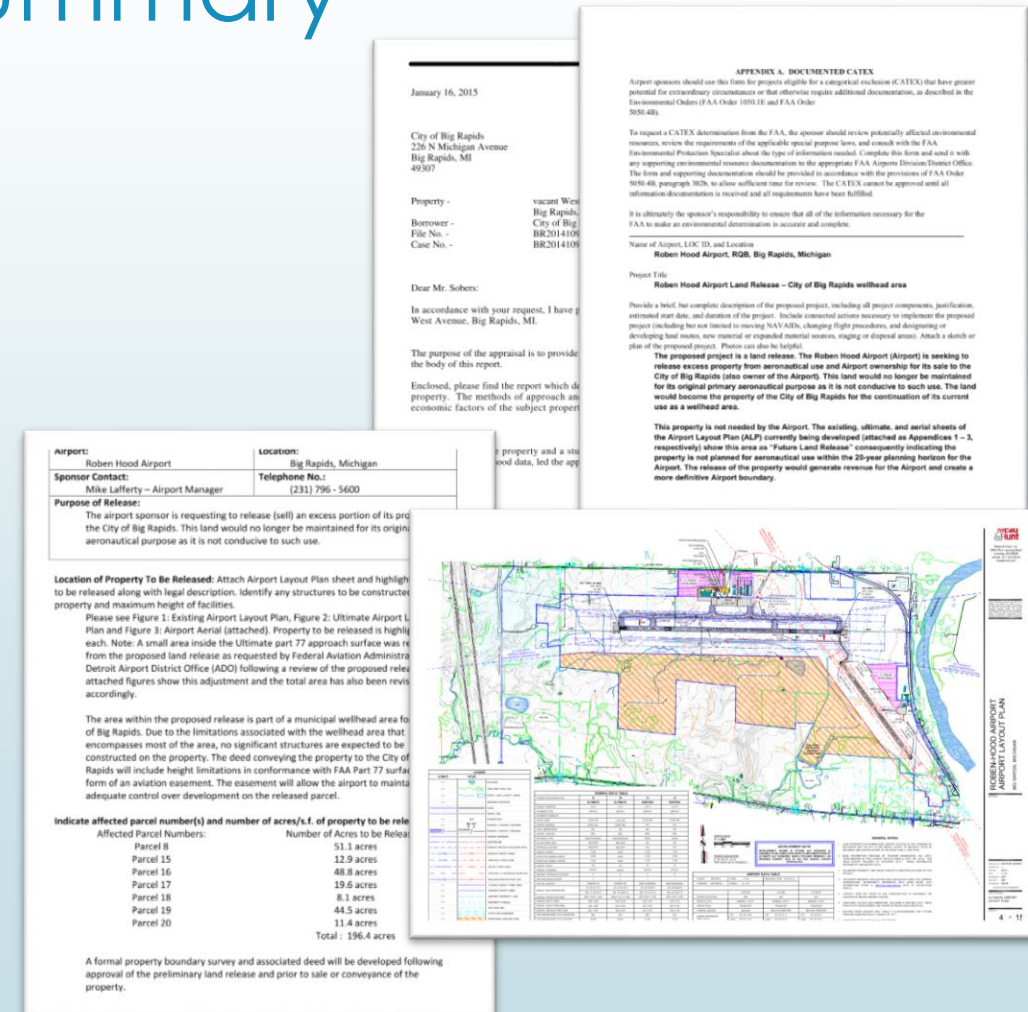
Indicate affected parcel number(s) and number of acres/s.f. of property to be released:

Check List Item Information Description	Explain briefly to provide an Understanding of response to checklist item.
ALP ISSUES:	
Will proposed use impact future airport development?	

3g. Land Releases

The Process – Summary

- Land Release Package
 - Land Release Summary
 - Responses to the 16 questions in narrative format
 - Boundary Description
 - Fair Market Value Appraisal
 - Environmental Clearance Document





3g. Land Releases (cont.) Common Challenges

- Documentation
 - Locating/reviewing historical documents
 - Extent of environmental documentation necessary
 - Agreement language and duration
- Costs
 - Benefits of release vs cost to obtain release
 - Who pays for release and associated elements
- Timing
 - Letter of intent vs actual release approval
 - Identified user
 - How long for FAA approval – will a developer wait for the process



3h. Wildlife Hazard Mitigation

- Wildlife hazards can be on or off airport
- Good Resource:
 - ACRP Report 35 Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports
- USDA Wildlife Services are a great resource will conduct review



3I. Environmental Review

- Types of Studies
 - Categorical Exclusions (CATEX)
 - Environmental Assessments (EA)
 - Environmental Impact Studies (EIS)
- Approximately 30 different environmental categories that require review depending upon the type of project
- FAA SOP 5.0 provides guidance on development of CATEXs



Questions on Planning & Development?



4. Funding & Revenue



4a. Funding and Revenue (cont.)

Funding

- Federal Funds
 - Primary Entitlements (Commercial Service Airports)
 - Typically at least \$1 million annually
 - Non-Primary Entitlements (GA Airports)
 - Typically \$150,000 annually
 - Funds have to be matched: 90% federal/5% state/5% local
 - State Apportionment (at MDOT discretion)
 - Discretionary (FAA & MDOT discretion)
- State Funds
- Local Funds



4b. Funding and Revenue (cont.)

Revenues

- Rents & Fees
 - Landing fees, fuel flow, other
- Through-the-fence-operations (see next slide)
- FBO fees
- Flight Training
- Leases
- Farming
- Other



4c. Funding and Revenues (cont.)

Through-the-Fence (TTF) Operations

- What are TTF operations?
 - FAA definition:
 - those activities permitted by an airport sponsor through an agreement that permits access to the public landing area by independent entities or operators offering an aeronautical activity or to owners of aircraft based on land adjacent to, but not part of, the airport property.
 - ACRP 10-12 – Report 114 Guidebook on Through the Fence Operations definition:
 - TTF operations occur when an airport sponsor grants an entity TTF access to the airport's airside infrastructure (e.g., runways and taxiways) and gives the entity permission to engage in TTF activities from property located adjacent to an airport (i.e., TTF property).



Questions on Funding & Revenues?



5. Community Communications

5. Community Communications

- How do you communicate with your airport community, boards, councils, and other groups?
 - Social Media
 - Special Events
 - Economic Interest Groups
 - Community Service Groups
 - Business Interests





5. Community Communications at JXN

- Administrator, County Commission, Airport Board, Advisory Council, Airport Zoning Boards, Staff, Airport Businesses, and Airport Users
- Primary method is email
- Web site
- Annual Report i.e. Newsletter
- Social Media
- Airport gatherings
- Brochures



5. Community Communications at JXN

Various airport groups

- Inform of incidents including photos from the scene
- Inform of runway/taxiway closures
- Inform weekly of key airport events
- Inform of snow related events
- Inform of equipment malfunctions, etc.



5. Community Communications at JXN Web site

- Lists hangars for rent or sale
- Has airport zoning information
- Past two newsletters
- Minimum standards, rules, policies
- Weather information
- Drone Information links
- Business information

5. Community Communications at JXN Annual reports

- In the form of a newsletter
- We only write good news
- Gives insight to the airport's personality
- Writes our history



5. Community Communications at JXN Social media

- Airport's Facebook page
- Reunited a lost dog
- Increased use in the future



5. Community Communications at JXN Airport gatherings

- Airport picnics
- EAA meetings



5. Community Communications at JXN Airport displays





Questions on Community Communications?



6. Operations



6. Operations

- 6a 5010 Inspections
- 6b Pavement Maintenance
- 6c Aircraft Refueling
- 6d Snow Removal
- 63 NOTAMS (Notice to Airmen)



6a. 5010 Inspections & State Licensing



6b. Pavement Maintenance





6c. Aircraft Refueling





6d. Snow Removal





6e. Notice to Airmen (NOTAMS)





Questions on Regulatory Items ?



7. Resources



7. Resources

- Michigan Association of Airport Executives (MAAE)
 - www.michairport.org
- MDOT Office of Aeronautics
 - www.Michigan.gov/aero
- Airport Cooperative Research Program (ACRP)
 - www.trb.org/acrp
- Federal Aviation Administration
 - www.faa.gov/airports/resources/
- Aircraft Owners and Pilots Association (AOPA)
 - www.aopa.org
- Consultants



Closing Discussion & Questions

- Evaluation Survey
- Contacts:
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